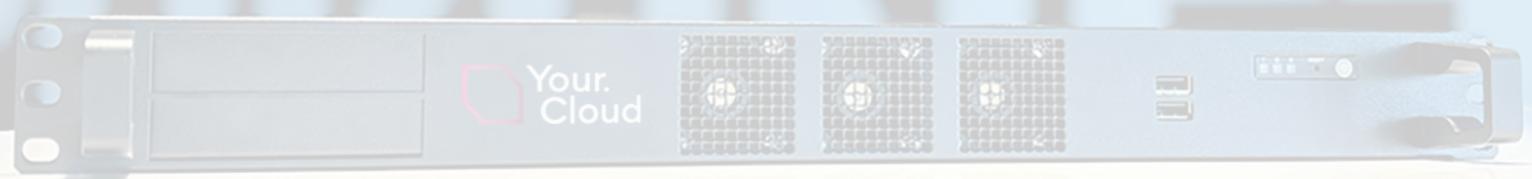


Security for Operational Technology: 19" IoT-Gateway for Your.Cloud-Member abtis



Introduction

Cyberattacks are not only a threat for IT systems in state authorities and companies. In these times of increasing digitalization and production environments connected to the Internet (IIoT), the threat level is also intensifying in these areas. As a result, the need for state-of-the-art hardware and software to protect operation technology (OT) against unwanted intruders is growing.

Acting as OEM, we created an IoT gateway in the classic 19" rack format suitable for use in industrial environments and critical infrastructures for our customer, abtis.

The company offers an agentless monitoring concept for OT systems as SOC as a Service (SOCaaS). Our hardware is an important part of the solution as a platform for the security application Microsoft Defender for IoT.

Under the name abtis OT Security Box, the server acts as an interface between OT networks comprising computers, machines and sensors, and cloud computing platforms (e.g. MS Azure and VMWare).

The Box' main task is to collect data from IoT devices, check them for malicious code, and pass them on to the cloud services as a filtered data stream.



Services for abtis GmbH

- Production system
- Installation of the images provided
- Functional and operational tests
- Quality assurance
- Technical service & after-sales support
- Monitoring the life cycle of components
- Provision of initial samples



Made in Germany: Development, Production, Services

As an expert in cyber security, abtis is one of the most trusted providers of IT security worldwide. The company is a member of the Your.Cloud family – one of the leading MSP platforms in Europe. For its OT Security Box, abtis was looking for an OEM who is flexible, has sufficient expertise in the development of IT hardware, and produces it in Germany. abtis found what it was looking for in Pyramid Computer GmbH, which has been supplying its customers with customized industrial computers and server solutions for 40 years.

Pyramid relies on modular platforms as the technological foundation for OEM solutions. These are in-house developments that we modify according to the customer's individual requirements. This enables us to achieve a fast time-to-market for our customers with tailor-made, high-quality and cost-efficient products.

The abtis OT Security Box is based on our 19" VarioFlex server platform. As one of abtis' top requirements was for a very high-performance yet energy-efficient IoT gateway, we employ a 14th generation Intel® Core™ i7 TE processor. In addition, this processor's low waste heat allows for active cooling to be dispensed with, so that the entire system fits into a 1U high chassis.

Space is a critical factor in almost every factory hall and in every server cabinet. That is why we designed the abtis OT Security Box with a depth of just 300mm. This means maximum utilization of the available resources when installed directly on the machine or in an electronics cabinet.

„For our OT Security Box, we were looking for a partner who not only develops hardware, but who also really understands our requirements – both technically and organizationally. We found exactly that partner in Pyramid. The collaboration was open, solution-oriented and on an equal footing right from the start. It was particularly important to us that the hardware be not only powerful and compact, but also produced in Germany. The Pyramid team impressed us with their experience and flexibility. The result speaks for itself – a robust, high-performance platform that fits in perfectly with our security approach with Microsoft Defender for IoT.“

- Lars Zuckschwerdt,
Head of Security & CISO,
abtis GmbH



The chassis of the IoT gateway is also optimized for industrial environments. The powder coating provides a high level of corrosion protection, good electrical insulation properties, and additional resistance to mechanical loads.

The abtis OT Security Box is made entirely in Germany. It is produced in Pyramid's own factory in Ichtershausen, Thuringia. The systems are assembled here, and the software images are also installed in this facility.